Patent claims:

1. The use of polymer powders that are redispersible in water as binding agents for jointing sand, characterized in that functionalized, redispersible polymer powders from the group consisting of

a) polyvinyl alcohol-stabilized copolymers of one or more monomers from the group consisting of the vinyl esters of straight-chain or branched alkylcarboxylic acids having 1 to 18 carbon atoms, acrylates or methacrylates of branched or straight-chain alcohols or diols having 1 to 18 carbon atoms, dienes, olefins, vinylaromatics and vinyl halides, which contain from 0.1 to 20% by weight, based on the total weight of the copolymer, one or more postcrosslinking comonomers from the group consisting of acrylamidoglycolic acid (AGA), methyl methylacrylamidoglycolate (MAGME), N-methylolacrylamide (NMA), N-methylolmethacrylamide (NMMA), allyl N-methylolcarbamate, alkyl ethers and esters of N-methylolacrylamide and of N-methylolmethacrylamide and of allyl N-methylolcarbamate, and acryloyloxypropyltri(alkoxy)- and methacryloyloxypropyltri(alkoxy)silanes, vinyltrialkoxysilanes and vinylmethyldialkoxysilanes, and

b) polymers of one or more monomers from the group consisting of the vinyl esters of straight-chain or branched alkylcarboxylic acids having 1 to 18 carbon atoms, acrylates or methacrylates of branched or straight-chain alcohols or diols having 1 to 18 carbon atoms, dienes, olefins, vinylaromatics and vinyl halides, which polymers are stabilized with polymers of ethylenically unsaturated mono- or dicarboxylic acids or anhydrides thereof, having an acid content of from 50 to 100 mol%,

are used as a mixture with sand.

2. The use as claimed in claim 1, characterized in that copolymers a) which contain one or more monomer units from the group consisting of vinyl acetate, vinyl esters of α-branched monocarboxylic acids having 9 to 13 carbon atoms, vinyl chloride, ethylene, methyl acrylate, methyl methacrylate, ethyl acrylate, ethyl methacrylate, propyl acrylate, propyl methacrylate, n-butyl acrylate, n-butyl methacrylate, 2-ethylhexyl acrylate and styrene, and contain from 1 to 10% by weight of one or more monomer units from the group consisting of N-methylolacrylamide, N-methylolmethacrylamide, acryloyloxypropyltri-ethoxy- and methacryloyloxypropyltriethoxysilane, vinyltriethoxysilane and vinylmethyldiethoxy-silane, are used.

3. The use as claimed in claim 1, characterized in that polymers of vinyl acetate with ethylene, of vinyl acetate with ethylene and a vinyl ester of α-branched monocarboxylic acids having 9 to 13 carbon atoms, of n-butyl acrylate with 2-ethylhexyl acrylate and/or methyl methacrylate, of styrene with one or more monomers from the group consisting of methyl acrylate, ethyl acrylate, propyl acrylate, n-butyl acrylate and 2-ethylhexyl acrylate; of vinyl acetate with one or more monomers from the group consisting of methyl acrylate, ethyl acrylate, propyl acrylate, n-butyl acrylate, 2-ethylhexyl acrylate and optionally ethylene; with from 1 to 10% by weight of N-methylolacrylamide or N-methylolmethacrylamide, are used as copolymers a).

4. The use as claimed in any of claims 1 to 3, characterized in that partly hydrolyzed polyvinyl alcohols or partly hydrolyzed, hydrophobically

modified polyvinyl alcohols having a degree of hydrolysis of from 80 to 95 mol% and a Höppler viscosity, in 4% strength aqueous solution, of from 1 to 30 mPa.s are contained as the polyvinyl alcohol.

5. The use as claimed in claim 1, characterized in that copolymers b) which are contained one or more monomer units from the group consisting of vinyl acetate, vinyl esters of α-branched monocarboxylic acids having 9 to 13 carbon atoms, vinyl chloride, ethylene, methyl acrylate, methyl methacrylate, ethyl acrylate, ethyl methacrylate, propyl acrylate, propyl methacrylate, n-butyl acrylate, n-butyl methacrylate, 2-ethylhexyl acrylate and styrene, which are stabilized with from 1 to 40% by weight of a protective colloid from the group consisting of the homo- and copolymers of one or more monomers from the group consisting of acrylic acid, methacrylic acid, fumaric acid, maleic acid and maleic anhydride, are used.

6. The use as claimed in claim 1 or 5, characterized in that polyacrylic acid or polymethacrylic acid are contained as the protective colloids.

7. The use as claimed in claim 1 or 5, characterized in that copolymers comprising acrylic acid, methacrylic acid and maleic acid (anhydride) units and units of monomers copolymerizable therewith, the proportion of acids being from 80 to 99 mol%, are contained as protective colloids.

8. The use as claimed in any of claims 1 to 4, characterized in that the powders based on the copolymers a) also contain bifunctional, masked aldehydes having at least 3 carbon atoms, from which aldehyde groups are liberated in an acidic medium, as crosslinking agents.

9. The use as claimed in any of claims 1 to 4 and 8, characterized in that the powders based on the copolymers a) also contain pulverulent, acidic additives.

10. The use as claimed in any of claims 1 and 5 to 7, characterized in that the powders based on the copolymers b) also contain pulverulent, basic additives.